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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,728	03/30/2001	Shunichi Seki	109101	4739

25944 7590 03/17/2004

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EXAMINER

LOUIE, WAI SING

ART UNIT PAPER NUMBER

2814

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/820,728	SEKI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Wai-Sing Louie	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,6 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,6 and 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/03</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- In claim 1 (currently amended), it is not understood what is meant by “in order that the electrode avoids contact with the hole injection/transportation layer”. The hole injection/transportation layer 16 is contacting electrode 11 in fig. 7 of the specification.

Claims 1 and 6 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- In claim 1 (currently amended), “in order that the electrode avoids contact with the hole injection/transportation layer” is claimed. However, the hole

injection/transportation layer 16 is contacting electrode 11 in fig. 7 of the specification. This is new matter.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, and 10 (in so far as they are understood) are rejected under 35 U.S.C. 102(e) as being anticipated by Tang et al. (US 6,384,529).

With regard to claims 1 and 10, Tang et al. disclose an organic electroluminescent display panel (col. 4, line 59 to col. 10, line 13 and fig. 6) comprising:

- A hole injection/transportation layer 60 (col. 6, line 20 and fig. 2 and 6);
- A light-emitting layer 60 disposed over the hole injection/transportation layer (col. 6, lines 21-22 and fig. 6);
- An electrode 72 over the light-emitting layer 60 (fig. 6);
- A bank 46 (fig. 2) having a wall 56 (fig. 3) abutting on the edges of the hole injection/transportation layer and the light-emitting layer 60 to define film formation regions (fig. 3) of the hole injection/transportation layer and the light-emitting layer (fig. 4), the bank 46 having a laminated structure with a plurality of

layers 26 and 46 to form at least a step between the layers, such that the film formation region of the light-emitting layer covers the film formation region of the hole injection/transportation layer (col. 5, line 17 to col. 6, line 13 and fig. 6).

With regard to claim 6, Burrows et al. disclose the hole transportation layer and the light-emitting layer 60 are deposited between a cathode 72 and an anode 36, and where light emitted by the light-emitting layer 60 is output through the cathode 72 (col. 6, lines 14-18).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al. (US 6,384,529) in view of Dawson et al. (US 6,054,356).

With regard to claims 9 and 12, Tang et al. disclose a passivation layer 46 is deposited on electrical addressing element 26 (col. 5, lines 47-50 and fig. 2), but do not disclose the bank has a rounded shape. However, Dawson et al. disclose a dielectric layer deposited on the structure would form a concave shaped profile (Dawson col. 6, lines 10-18 and fig. 3). Dawson et al. teach the meniscus shape (rounded corners) of the dielectric layer is due the viscosity (surface tension) of the dielectric material (Dawson col. 6, lines 17-20). Therefore, it would have been obvious for the one with ordinary skill in the art to modify Tang's device with the teaching of Dawson et al.

to have the meniscus shape to define the film formation region it is because the viscosity of the dielectric material.

With regard to claim 11, Tang et al. do not disclose the shapes of the first and second film formation regions are quadrilateral. However, fig. 6 shows the film formation region has two walls, i.e. wall 54 and 56. Tang et al. disclose the organic EL is a matrix array of display panel (col. 3, lines 41-45). Therefore, each organic EL cell must have 4 walls (quadrilateral).

With regard to claims 13-14, Tang et al. disclose the wall of the bank has a slope to define the film formation region of the light-emitting layer 60 being larger in the top area than the bottom, where the hole injection/transportation layer (fig. 3).

### ***Response to Arguments***

Applicant's arguments filed 12/31/03 have been fully considered:

- Applicant argues that Tang et al. do not teach, disclose, or suggest “the bank having a laminated structure with a plurality of layers to form at least a step between the layers, such that the film formation region of the light-emitting layer covers the film formation region of the hole injection/transportation layer in order that the electrode avoids contact with the hole injection/transportation layer”. However, “the electrode avoids contact with the hole injection/transportation layer” is new matter. Argument is moot.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai-Sing Louie whose telephone number is (571) 272-1709. The examiner can normally be reached on 7:30 AM to 4:00 PM.

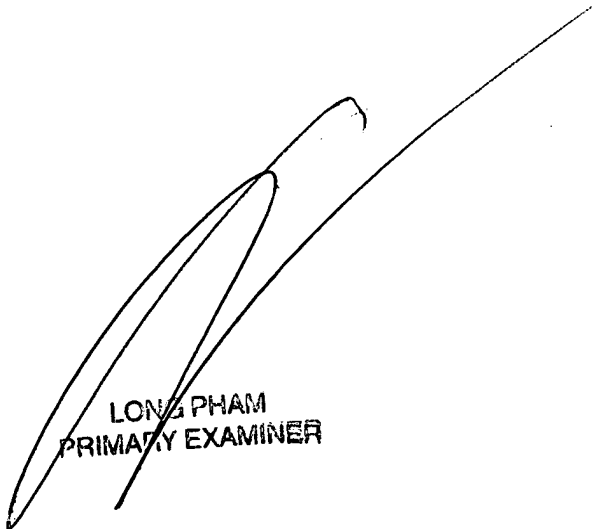
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2814

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wsl

March 6, 2004.



LONG PHAM  
PRIMARY EXAMINER